

Abstract

In an electric power steering system providing steering assist by applying a power of an electric motor to a steering mechanism via a reduction mechanism, the steering mechanism extending from a steering member to dirigible wheels, a grease (viscous material) is applied to a meshing engagement portion between teeth portions disposed on a motor-power transmission path extending from the electric motor to the steering mechanism via the reduction mechanism, the grease having a viscosity constant C satisfying $0.8J\omega_p \leq C$ where J denotes the inertia of the electric motor, and ω_p denotes the resonant angular frequency of the steering mechanism including the electric motor and the reduction mechanism. This provides for the prevention of the occurrence of rattling noises caused by a vibration system including the reduction mechanism and the electric motor and the degradation of the steering feeling.